Filing Date: September 15, 2003

## REMARKS

Claims 1-73 were pending in the application and subject to a restriction requirement. New claims 74-97 have been added. Claims 1-49, 52, 64 and 66-69 have been cancelled without prejudice. Claims 50, 51, 53-57 and 61 have been amended.

The claims were amended to further clarify the claimed invention. Support for the amendments to the claims as well as for new claims 47-97 can be found throughout the application as originally filed, including, for example, in the as-filed claims, Table 17 (at page 111 of the published application) and paragraphs [0044], [0045], [0071], [0079], [0085], [0086], [0176], [0177], [0192], [0235], [0290] and [0291].

No new matter has been added.

Upon entry of this amendment, claims 50, 51, 53-63, 65 and 70-97 will be pending.

## **Restriction Requirement**

Claims 1-73 are subject to a restriction requirement. The Examiner required Applicants to elect one of fourteen allegedly patentably distinct inventions for examination as follows:

- I. Claims 1-15, and 45-46, drawn to an isolated nucleic acid, host cell, expression vector, a kit comprising the nucleic acids for diagnosing the presence of cancer, classified in class 536, subclass 23.1.
- II. Claims 16-21, drawn to isolated peptide encoded within an open reading frame of a CA sequence, classified in class 530, subclass 300 or subclass 350.
- III. Claims 22-41, drawn to an isolated antibody, hybridoma, pharmaceutical composition, or a kit comprising antibody, classified in class 530, subclass 387.1.

Filing Date: September 15, 2003

- IV. Claim 42, drawn to an in vitro method for detecting a presence or absence of a cancer cells with antibody, classified in class 435, subclass 7.1 and 7.92.
- V. Claim 43-44, drawn to an in vivo method for inhibiting growth of cancer cells in an individual comprising administering to the individual an effective amount of a pharmaceutical composition comprising antibody, classified in class 424, subclass 130.1.
- VI. Claims 47-48, drawn to an electronic library comprising a polynucleotide, or its fragment, classified in class 536, subclass 23.1.
- VII. Claim 49, drawn to an electronic library comprising a polypeptide, or its fragment, classified in class 530, subclass 300, and 350.
- VIII. Claims 50-53, drawn to a method of screening for anticancer activity comprising contacting an anticancer drug candidate to a cell expressing the CA gene and monitoring the effect of the cancer drug, classified in class 435, subclass 7.23.
- IX. Claims 54-55, drawn to a method of detecting and comparing the CA polypeptide expression, classified in class 435, subclass 4, class 436, subclass 536.
- X. Claims 56, drawn to a method of detecting and comparing the levels of CA polypeptide antibody (autoantibody) a test serum sample, classified in class 436, subclass 512, class 435, subclass 7.1, and class 424, subclass 130.1.
- XI. Claims 57-60, drawn to a method for screening for a bioactive agent capable of modulating the activity of a CA protein, classified in class 435, subclass 7.23.
- XII. Claim 61, drawn to a method of diagnosing cancer comprising determining the gene expression of the CA gene comprising by determining the RNA expression, classified in class 436, subclass 6.

XIII. Claims 62-70, drawn to a method of treating cancers comprising administering to a patient an inhibitor of CA protein, classified in class 514, subclass 1 (see note on next page).

XIV. Claims 71-73, drawn to a method of inhibiting expression of a CA gene in a cell by contacting a cell with a double stranded RNA that hybridize to a CA mRNA, classified in class 514, subclass 44.

(Office Action, page 2).

Applicants respectfully disagree on the grounds that searching more than one of the groups set forth by the Office would pose no serious burden on the Examiner.

MPEP §803 sets forth criteria for determining when restriction is proper, stating, *inter alia*, that "[i]f the search and examination of all the claims in an application can be made without serious burden, the examiner must examine them on the merits, even though they include claims to independent or distinct inventions." Applicants respectfully assert that searching more than one group would not constitute a serious burden. For example, Applicants note that several groups are amenable to further grouping. For example, Groups VIII and XII both include comparing expression levels of the cancer associated gene. Accordingly, search results for Group VIII would be highly relevant to Group XII, and vice versa. Applicants respectfully assert that search and examination of several groups can readily be performed without serious burden. Applicants further point out that searching more than one human mRNA sequence for each CA gene would not constitute an undue burden. For example, Applicants respectfully suggest that SEQ ID NOS: 43, 45, 47 and 49 be searched together.

Although Applicants respectfully traverse the restriction requirement on the grounds that examining more than one invention would not constitute a serious burden, Applicants provisionally elect herein Group XII "Claim 61, drawn to a method of diagnosing cancer comprising determining the gene expression of the CA gene comprising by determining the RNA expression, classified in class 436, subclass 6." Applicants further elect SEQ ID NO:43. Claim 61 and new claims 74-97 read on the elected invention.

Ser. No. 10/663,431

PATENT

Filing Date: September 15, 2003

Applicants reserve the right to prosecute the claims encompassed by any of the non-elected

groups in future divisional applications.

**Related Applications** 

Applicants call the Examiner's attention to the following related application: 10/545,777

(filed June 5, 2006; pending). This application is available in PAIR and the Examiner is encouraged

to review it.

Conclusion

The examination of the pending claims and passage to allowance are respectfully requested.

An early Notice of Allowance is therefore earnestly solicited. Applicants invite the Examiner to

contact the undersigned at (302) 778-8458 to clarify any unresolved issues raised by this response.

Please apply any charges or credits to Deposit Account No. 06-1050 referencing Attorney

Docket No. 20366-071001.

Respectfully submitted,

Gwilym John Owen Attwell

Registration No. 45,449

Date: <u>December 13, 2007</u>

Fish & Richardson P.C.

P.O. Box 1022

Minneapolis, MN 55440-1022

(302) 652-5070 telephone

(877) 769-7945

80052852.DOC

15